

March 27, 2003

Re: Elpaco Coatings Corporation 039-16794-00248

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

(over)

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
Administrator, Christine Todd Whitman
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNTVPMOD.wpd 8/21/02

May 27, 2003

Mike Reed
Elpaco Coatings Corporation
P.O. Box 1769
Elkhart, Indiana 46515

Re: **039-16794-00248**
First Minor Permit Modification to
Part 70 No.: T 039-8940-00248

Dear Mr. Reed:

Elpaco Coatings Corporation was issued a permit on January 19, 2000 for a paint production operation. An application to modify the source was received on November 21, 2002, with additional information received on February 4, 2003.

Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of one (1) steel ball mill, identified as SB.

To incorporate the proposed mill into the existing Part 70 permit, the following changes shall be made. All information added is in bold type. All deleted information is Struck-out.

1. Condition A.2:

Condition A.2 shall be amended as follows to remove the SW mill reference and replace it with the steel ball mill reference.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) paint production process, identified as EU-01, constructed in 1954, exhausting to the general ventilation stacks (GV) and fugitively, with a maximum capacity of 1,308.09 pounds of raw materials per hour, total, consisting of the following:

.....

- (d) One (1) **steel ball** mill, identified as ~~SWSB~~, ~~exhausting through the general ventilation stacks (GV) and fugitively, capacity: 245.09 pounds of raw material per hour.~~

2. Section D.1 Unit Description:

The unit description of Section D.1 shall be amended as follows to remove the SW mill reference and replace it with the steel ball mill reference.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) paint production process, identified as EU-01, constructed in 1954, exhausting to the general ventilation stacks (GV) and fugitively, with a maximum capacity of 1,308.09 pounds of raw materials per hour, total, consisting of the following:

.....

- (d) One (1) **steel ball** mill, identified as ~~SWSB~~, ~~exhausting through the general ventilation stacks (GV) and fugitively, capacity: 245.09 pounds of raw material per hour.~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

3. Condition D.1.1:

Condition D.1.1 shall be amended as follows to remove the SW mill reference and replace it with the steel ball (SB) mill reference.

D.1.1 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1][326 IAC 8-1-6]

- (a) The raw material input to the six (6) mixing tanks constructed in 1992 shall not exceed 1,664 tons per consecutive twelve (12) month period. Each ton of cleanup solvent used at the six (6) mixing tanks, MT1 through MT6, shall be considered equivalent to 66.7 tons of raw materials input to the paint production process. This will limit the potential to emit VOC from the six (6) mixing tanks (MT1, MT2, MT3, MT4, MT5 and MT6) to less than 25 tons per year, using the emission factor from AP-42 and FIRES of 30 pounds of VOC per ton produced. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to these facilities.

.....

- (d) Any change or modification that increases the raw material input to the one (1) **steel ball** mill, identified as ~~SWSB~~, to 1,664 tons per year or more, with each ton of cleanup solvent used at the one (1) **steel ball** mill, identified as ~~SWB~~, considered equal to 66.7 tons of raw materials input to the paint production process at the one (1) mill, shall increase the potential to emit VOC to 25 tons per year or more and shall require prior IDEM, OAQ approval.

4. New Condition D.1.3:

A new Condition D.1.3 shall be added as follows to include the new 326 IAC 6-3-2 PM limit associated with the SB mill.

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the SB mill shall not exceed 0.99 pounds per hour when operating at a process weight rate of 245.09 pounds per hour.

5. Existing Condition D.1.6:

Existing Condition D.1.6 (now Condition D.1.7) shall be amended as follows to change the SW mill to the SB mill.

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.1.1.
- (1) The amount and VOC content of each coating produced and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The raw material input to the four (4) mixing/blending tanks, identified as MT7 through MT10, constructed in 1998, and the weight of cleanup solvents used at those tanks;
 - (3) The raw material input to the six (6) mixing tanks constructed in 1992, identified as MT1 through MT6, constructed in 1992, and the weight of cleanup solvents used at those tanks;
 - (4) The raw material input to the one (1) mill, identified as ~~SWB~~, and the weight of cleanup solvents used at that mill;
 - (5) The weight of VOCs and HAPs emitted at the four (4) mixing/blending tanks (MT7, MT8, MT9 and MT10) for each compliance period;
 - (6) The weight of VOCs emitted at the six (6) mixing tanks (MT1, MT2, MT3, MT4, MT5 and MT6) for each compliance period; and
 - (7) The weight of VOCs and HAPs emitted at the one (1) mill, identified as ~~SWB~~, for each compliance period.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly particulate observations and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

6. Renumbering:

All conditions after new Condition D.1.3 shall be renumbered accordingly.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Fulton, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Scott Fulton or extension (3-5691), or dial (317) 233-5691.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

SDF

cc: File - Elkhart County
U.S. EPA, Region V
Elkhart County Health Department
Northern Regional Office
Air Compliance Section Inspector - Greg Wingstrom
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Elpaco Coatings Corporation
28867 Old US 33 West
Elkhart, Indiana 46516**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 039-8940-00248	Date Issued: January 19, 2000
First Administrative Amendment No.: 039-11967-00248	Date Issued: April 12, 2000
Second Administrative Amendment No.: 039-11995-00248	Date Issued: August 4, 2000
First Significant Permit Modification No.: 039-14360-00248	Date Issued: July 19, 2001
First Minor Permit Modification No.: 039-16794-00248	Affected Pages: 5, 28, 29, 30, and 31
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 27, 2003

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary paint production source.

Responsible Official: Mike Reed
Source Address: 28867 Old US 33 West, Elkhart, Indiana 46516
Mailing Address: P.O. Box 1769, Elkhart, Indiana 46515
Phone Number: 219-295-3991
SIC Code: 2851
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) paint production process, identified as EU-01, constructed in 1954, exhausting to the general ventilation stacks (GV) and fugitively, with a maximum capacity of 1,308.09 pounds of raw materials per hour, total, consisting of the following:
 - (1) One (1) pebble mill.
 - (2) One (1) steel ball mill.
 - (3) Two (2) sand mills.
 - (4) Three (3) dispersers.
 - (5) Fifteen (15) paint mixers (nine (9) stationary and six (6) portable).
- (b) Four (4) mixing/blending tanks, identified as MT7, MT8, MT9 and MT10, installed in 1998, exhausting to the general ventilation stacks (GV) and fugitively, capacity: 475.99 pounds of raw material per hour, total.
- (c) Six (6) mixing tanks, identified as MT1, MT2, MT3, MT4, MT5 and MT6, installed in 1992, exhausting to the general ventilation stacks (GV) and fugitively, capacity: 367.91 pounds of raw material per hour, total.

- (d) One (1) steel ball mill, identified as SB.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) paint production process, identified as EU-01, constructed in 1954, exhausting to the general ventilation stacks (GV) and fugitively, with a maximum capacity of 1,308.09 pounds of raw materials per hour, total, consisting of the following:
 - (1) One (1) pebble mill.
 - (2) One (1) steel ball mill.
 - (3) Two (2) sand mills.
 - (4) Three (3) dispersers.
 - (5) Fifteen (15) paint mixers (nine (9) stationary and six (6) portable).
- (b) Four (4) mixing/blending tanks, identified as MT7, MT8, MT9 and MT10, installed in 1998, exhausting to the general ventilation stacks (GV) and fugitively, capacity: 475.99 pounds of raw material per hour, total.
- (c) Six (6) mixing tanks, identified as MT1, MT2, MT3, MT4, MT5 and MT6, installed in 1992, exhausting to the general ventilation stacks (GV) and fugitively, capacity: 367.91 pounds of raw material per hour, total.
- (d) One (1) steel ball mill, identified as SB.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1][326 IAC 8-1-6]

- (a) The raw material input to the six (6) mixing tanks constructed in 1992 shall not exceed 1,664 tons per consecutive twelve (12) month period. Each ton of cleanup solvent used at the six (6) mixing tanks, MT1 through MT6, shall be considered equivalent to 66.7 tons of raw materials input to the paint production process. This will limit the potential to emit VOC from the six (6) mixing tanks (MT1, MT2, MT3, MT4, MT5 and MT6) to less than 25 tons per year, using the emission factor from AP-42 and FIRES of 30 pounds of VOC per ton produced. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to these facilities.
- (b) The raw material input to the four (4) mixing/blending tanks constructed in 1998 shall not exceed 1,664 tons per consecutive twelve (12) month period. Each ton of cleanup solvent used at the four (4) mixing/blending tanks, MT7 through MT10, shall be considered equivalent to 66.7 tons of raw materials input to the paint production process. This will limit the potential to emit VOC from the four (4) mixing/blending tanks (MT7, MT8, MT9 and MT10) to less than 25 tons per year and the potential to emit each individual HAP to less than 10 tons per year, using the emission factor from AP-42 and FIRES of 30 pounds of VOC per ton produced and a maximum individual HAP content of thirty-six percent (36.0%) in coatings produced. Therefore, the requirements of 326 IAC 2-4.1-1 and 326 IAC 8-1-6 are not applicable to these facilities.

- (c) The requirement from CP 039-8959-00248, issued on January 28, 1998, Condition 8, that VOC input usage in mixing/blending tanks M7 through MT10 shall be limited to 2,200,621.4 pounds per year (lb/yr), rolled on a monthly basis, which will result in VOC emissions of 22 tons per year, based on a monthly basis is not applicable because the limitation in the previous permit was not based on the current emission factors. The source will continue to limit VOC emissions to less than 25 tons per year from the four (4) mixing/blending tanks constructed in 1998 as indicated in paragraph (b) of this condition.
- (d) Any change or modification that increases the raw material input to the one (1) steel ball mill, identified as SB, to 1,664 tons per year or more, with each ton of cleanup solvent used at the one (1) steel ball mill, identified as SB, considered equal to 66.7 tons of raw materials input to the paint production process at the one (1) mill, shall increase the potential to emit VOC to 25 tons per year or more and shall require prior IDEM, OAQ approval.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) The PM from the paint production process shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) The requirement from CP 039-8959-00248, issued on January 28, 1998, Operation Condition 9, that pursuant to 326 IAC 6-3 (Process Operations), the pigment handling shall have an allowable PM emissions 0.93 pounds per hour, based on the following equation: $E = 4.10P^{0.67}$, where E is the PM allowable emission in pound per hour and P is the process weight rate in ton per hour, is not applicable because the limitations in the previous permit are only for the pigment handling at the four (4) mixing/blending tanks constructed in 1998, and the allowable PM emission rate must reflect the total source capacity for pigment handling.

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the SB mill shall not exceed 0.99 pounds per hour when operating at a process weight rate of 245.09 pounds per hour.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified by Condition D.1.2(a) shall be determined by a

performance test conducted in accordance with Section C - Performance Testing.

Elpaco Coatings Corporation
Elkhart, Indiana
Permit Reviewer: SDF

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Modified By: SDF

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Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Monitoring

-
- (a) Weekly observations shall be made of the particulate from the paint production stacks (GV) while the paint production process is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (b) Monthly inspections shall be performed of the emissions from the stacks, windows and doors and the presence of particulate on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in particulate emission, or evidence of particulate emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.1.1.
 - (1) The amount and VOC content of each coating produced and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The raw material input to the four (4) mixing/blending tanks, identified as MT7 through MT10, constructed in 1998 and the weight of cleanup solvents used at those tanks;
 - (3) The raw material input to the six (6) mixing tanks constructed in 1992, identified as MT1 through MT6, constructed in 1992 and the weight of cleanup solvents used at those tanks;
 - (4) The raw material input to the one (1) mill, identified as SB, and the weight of cleanup solvents used at that mill;
 - (5) The weight of VOCs and HAPs emitted at the four (4) mixing/blending tanks (MT7, MT8, MT9 and MT10) for each compliance period;
 - (6) The weight of VOCs emitted at the six (6) mixing tanks (MT1, MT2, MT3, MT4, MT5 and

MT6) for each compliance period; and

Elpaco Coatings Corporation
Elkhart, Indiana
Permit Reviewer: SDF

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- (7) The weight of VOCs and HAPs emitted at the one (1) mill, identified as SB, for each compliance period.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly particulate observations and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1(a) and D.1.1(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Modification and a Minor Permit Modification to a Part 70 Permit

Source Background and Description

Source Name:	Elpaco Coatings Corporation
Source Location:	28867 Old US 33 West, Elkhart, Indiana 46515
County:	Elkhart
SIC Code:	2851
Part 70 Permit No.:	039-8940-00248
Operation Permit Issuance Date:	January 19, 2000
Minor Source Modification No.:	039-16492-00248
Minor Permit Modification No.:	039-16794-00248
Permit Reviewer:	SDF

Request

On July 19, 2001, Elpaco was issued a Significant Permit Modification (039-14360-00248). This permit modification included the addition of one (1) SW mill.

Elpaco Coatings has proposed the installation of a steel ball mill instead of the SW mill. Pursuant to 326 IAC 2-7-10.5(i), the owner or operator receiving a modification under 326 IAC 2-7-10.5 must commence construction within 18 months of the issuance of the modification approval. Elpaco did not commence construction by within 18 months (by January 19, 2003).

Therefore, the proposed steel ball mill must be considered a new unit, not a replacement for the SW mill.

The proposed steel ball mill will not generate an increase in capacity or emissions from any existing source emission units. Therefore, the emissions generated by the proposed modification are the emissions generated by the steel ball mill.

The steel ball mill generates PM, PM10, VOC and HAP emissions. The PM, PM10, VOC, and single and combined HAP unrestricted potential to emit (UPTE) are estimated to be 0.39, 0.39, 15.52, 3.00, and 5.57 tons per year, respectively.

The VOC UPTE from the modification is greater than the low end applicable level of 10 tons per year but less than the upper end level of 25 tons per year, all other criteria pollutant emissions from the modification are less than the low end applicable level of 25 tons per year, the worst case single HAP emissions from the modification are less than the applicable level of 10 tons per year, and the combined HAP emissions from the modification are less than the applicable level of 25 tons per year.

Therefore, the proposed steel ball mill will be permitted via a minor source modification pursuant to 326 IAC 2-7-10.5(d)(4)(B) which states that modifications with VOC emissions greater than 10 tons per year but less than 25 tons per year shall be permitted via a minor source modification.

The proposed steel ball mill will be incorporated into the existing source Part 70 Permit via a Minor Permit

Modification pursuant to 326 IAC 2-7-12.

Existing Approvals

The source has been operating under Part 70 permit 039-8940-00248, issued on January 19, 2000, 1st Administrative Amendment 039-11967-00248, issued on April 12, 200, 2nd Administrative Amendment 039-11995-00248, issued on August 4, 2000, and 1st Significant Permit Modification 039-14360-00248, issued on July 19, 2001.

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification and Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information received on February 4, 2003.

Emission Calculations

1. Unrestricted Potential to Emit (UPTE) Due to the Modification:

The unrestricted potential to emit (UPTE) due to the proposed modification are the PM, PM10, VOC, and HAP emissions from the proposed mill.

a. PM/PM10 Emissions:

The following calculations determine the steel ball mill PM/PM10 UPTE based on a maximum pigment input rate of 8.83 lb/hr, AP-42 emission factors, 8760 hours of operation, and emissions before controls.

$$8.83 \text{ lb pig./hr} * 1/2000 \text{ ton pig./lb pig.} * 20 \text{ lb PM/ton pig.} * 8760 \text{ hr/yr} * 1/2000 \text{ ton PM/lb PM} = 0.39 \text{ ton PM/yr}$$

PM10 is determined to be equal to PM in this case.

b. VOC Emissions:

The following calculations determine the steel ball mill VOC UPTE based on a maximum product input rate of 236.26 lb/hr, AP-42 emission factors, 8760 hours of operation, and emissions before controls.

$$236.26 \text{ lb pig./hr} * 1/2000 \text{ ton pig./lb pig.} * 30 \text{ lb VOC/ton pig.} * 8760 \text{ hr/yr} * 1/2000 \text{ ton VOC/lb VOC} = 15.52 \text{ ton VOC/yr}$$

c. Single and Combined HAP Emissions:

The following calculations determine the steel ball mill single and combined HAP emissions based on the SW mill estimated emissions (single and combined HAP emissions of 3.12 and 5.80 tons/yr, respectively), a steel ball mill to SW mill ratio of 0.96, 8760 hours of operation, and emissions before controls.

$$\text{Steel Ball Mill Emissions} / \text{SW Mill Emissions} = [15.52 \text{ tons/yr}] / [16.10 \text{ tons/yr}] = 0.96$$

$$\text{Single HAP Emissions: } 0.96 * 3.12 \text{ tons/yr} = 3.00 \text{ tons/yr}$$

$$\text{Combined HAP Emissions: } 0.96 * 5.80 \text{ tons/yr} = 5.57 \text{ tons/yr}$$

2. Emissions After Controls:

The Emissions from the proposed mill are uncontrolled. Thus, the emissions after controls equal the emissions before controls.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls due to the modification based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.39
PM-10	0.39
SO ₂	-
VOC	15.52
CO	-
NO _x	-

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Pollutant	Potential To Emit (tons/year)
Worst Case Single HAP	3.00
Combined HAP	5.57

The VOC UPTE from the modification is greater than the low end applicable level of 10 tons per year but less than the upper end level of 25 tons per year, all other criteria pollutant emissions from the modification are less than the low end applicable level of 25 tons per year, the worst case single HAP emissions from the modification are less than the applicable level of 10 tons per year, and the combined HAP emissions from the modification are less than the applicable level of 25 tons per year.

Therefore, the proposed steel ball mill will be permitted via a minor source modification pursuant to 326 IAC 2-7-10.5(d)(4)(B) which states that modifications with VOC emissions greater than 10 tons per year but less than 25 tons per year shall be permitted via a minor source modification.

The proposed steel ball mill will be incorporated into the existing source Part 70 Permit via a Minor Permit Modification pursuant to 326 IAC 2-7-12.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD Definition (emissions after controls, based on emissions obtained from the Technical Support Document (TSD) of MSM 14183):

	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Source	47.80	47.90	0.01	0.78	<194	0.66	75.60	85.70

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

- (a) The existing source is not a major PSD stationary source because no criteria pollutant emissions are greater than the applicable level or 250 tons per year or more and it is not one of the 28 listed source categories.

- (b) This existing source is a Title V major stationary source because the VOC emissions are greater than the applicable level of 100 tons per year and the single and combined HAP emissions exceed their respective applicable levels of 10 and 25 tons per year.

Emissions Due to the Modification

Emissions due to the modification (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Source	0.39	0.39	-	-	15.52	-	3.00	5.57

PSD Major Levels	250	250	250	250	250	250	-	-
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The modification is not a major PSD modification because none of the regulated pollutants exceed their respective major source applicable levels.

Emissions After the Modification

Source emissions after the modification (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Source	47.80	47.90	0.01	0.78	<194	0.66	75.60	85.70
Modification	0.39	0.39	-	-	15.51	-	3.00	5.57
Total	48.19	48.29	0.01	0.78	<194	0.66	78.6	91.27

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

- (a) The source after the modification is not a major PSD stationary source because no criteria pollutant emissions after the modification are greater than the applicable level of 250 tons per year or more and it is not one of the 28 listed source categories.
- (b) This source after the modification is still a Title V major stationary source because the VOC emissions are still greater than the applicable level of 100 tons per year and the single and combined HAP emissions still exceed the respective applicable levels of 10 and 25 tons per year.

Federal Rule Applicability

(a) New Source Performance Standards (NSPS):

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to the proposed steel ball mill.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAP):

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 326 IAC 20; 40 CFR Part 61 and 40 CFR Part 63) applicable to the proposed steel ball mill.

State Rule Applicability - Entire Source

(a) 326 IAC 1-5-2 (Emergency Reduction Plans)

The source is still subject to the requirements of 326 IAC 1-5-2. The source has met the requirements of this rule by submitting an Emergency Reduction Plan (December 3, 1997).

(b) 326 IAC 1-7 (Stack height Provisions)

The requirements of 326 IAC 1-7 still apply to the source.

(c) 326 IAC 2-2 (Prevention of Significant Deterioration)

The modification is not a major PSD modification because none of the regulated pollutants exceed their respective major source applicable levels.

(d) 326 IAC 2-6 (Emission Reporting)

This source is still subject to the requirements of 326 IAC 2-6 because the VOC potential to emit is still greater than the Elkhart County applicable level of ten (10) tons per year.

(e) 326 IAC 4-1 (Open Burning)

The requirements of 326 IAC 4-1 still apply to the source.

(f) 326 IAC 4-2 (Incineration)

The requirements of 326 IAC 4-2 still apply to the source.

(g) 326 IAC 5-1 (Opacity Emissions Limitations)

The requirements of 326 IAC 5-1 still apply to the source.

(h) 326 IAC 6-4 (Fugitive Dust Emission Limitations)

The requirements of 326 IAC 6-4 still apply to the source.

State Rule Applicability - Individual Facilities

(a) 326 IAC 2-4.1-1 (New Source Toxics Control)

The requirements of 326 IAC 2-4.1-1 do not apply to the proposed modification because the single and combined HAP emissions are less than the respective applicable levels of 10 and 25 tons per year.

(b) 326 IAC 6-3-2 (Process Operations)

The requirements of 326 IAC 6-3-2 apply to the proposed modification. Pursuant to 326 IAC 6-3-2(e), the PM emissions limit for the SB mill, based on a process weight rate of 245.09 pounds per hour, shall be 0.99 lb/hr.

$$E = 4.10 P^{0.67} = 4.10 * (0.12)^{0.67} = 0.99 \text{ lb/hr}$$

Where: P = Process Weight Rate (0.12 tons/hr)
E = Emission Limit (lb/hr)

The hourly PM emission rate from the SB mill is estimated to be 0.09 lb/hr which is less than the limit of 0.99 lb/hr.

$$0.39 \text{ ton/yr} * 2000 \text{ lb/ton} * 1/8760 \text{ yr/hr} = 0.09 \text{ lb/hr}$$

Thus, compliance is determined to be achieved.

(c) 326 IAC 8-1-6 (New Facilities; General reduction requirements)

The requirements of 326 IAC 8-1-6 do not apply to the proposed modification because the VOC UPTe is less than the applicable rate of 25 tons/yr.

Changes to the Permit

1. Condition A.2:

Condition A.2 shall be amended as follows to remove the SW mill reference and replace it with the steel ball mill reference.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) paint production process, identified as EU-01, constructed in 1954, exhausting to the general ventilation stacks (GV) and fugitively, with a maximum capacity of 1,308.09 pounds of raw materials per hour, total, consisting of the following:

.....

- (d) One (1) **steel ball** mill, identified as ~~SWSB~~, ~~exhausting through the general ventilation stacks (GV) and fugitively, capacity: 245.09 pounds of raw material per hour.~~

2. Section D.1 Unit Description:

The unit description of Section D.1 shall be amended as follows to remove the SW mill reference and

replace it with the steel ball mill reference.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) paint production process, identified as EU-01, constructed in 1954, exhausting to the general ventilation stacks (GV) and fugitively, with a maximum capacity of 1,308.09 pounds of raw materials per hour, total, consisting of the following:

.....

- (d) One (1) **steel ball** mill, identified as ~~SWSB~~, ~~exhausting through the general ventilation stacks (GV) and fugitively, capacity: 245.09 pounds of raw material per hour.~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

3. Condition D.1.1:

Condition D.1.1 shall be amended as follows to remove the SW mill reference and replace it with the steel ball (SB) mill reference.

D.1.1 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1][326 IAC 8-1-6]

- (a) The raw material input to the six (6) mixing tanks constructed in 1992 shall not exceed 1,664 tons per consecutive twelve (12) month period. Each ton of cleanup solvent used at the six (6) mixing tanks, MT1 through MT6, shall be considered equivalent to 66.7 tons of raw materials input to the paint production process. This will limit the potential to emit VOC from the six (6) mixing tanks (MT1, MT2, MT3, MT4, MT5 and MT6) to less than 25 tons per year, using the emission factor from AP-42 and FIRES of 30 pounds of VOC per ton produced. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to these facilities.

.....

- (d) Any change or modification that increases the raw material input to the one (1) **steel ball** mill, identified as ~~SWSB~~, to 1,664 tons per year or more, with each ton of cleanup solvent used at the one (1) **steel ball** mill, identified as ~~SWB~~, considered equal to 66.7 tons of raw materials input to the paint production process at the one (1) mill, shall increase the potential to emit VOC to 25 tons per year or more and shall require prior IDEM, OAQ approval.

4. New Condition D.1.3:

A new Condition D.1.3 shall be added as follows to include the new 326 IAC 6-3-2 PM limit associated with the SB mill.

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the SB mill shall not exceed 0.99 pounds per hour when operating at a process weight rate of 245.09 pounds per hour.

5. Existing Condition D.1.6:

Existing Condition D.1.6 (now Condition D.1.7) shall be amended as follows to change the SW mill to the SB mill.

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.1.1.
- (1) The amount and VOC content of each coating produced and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The raw material input to the four (4) mixing/blending tanks, identified as MT7 through MT10, constructed in 1998, and the weight of cleanup solvents used at those tanks;
 - (3) The raw material input to the six (6) mixing tanks constructed in 1992, identified as MT1 through MT6, constructed in 1992, and the weight of cleanup solvents used at those tanks;
 - (4) The raw material input to the one (1) mill, identified as ~~SWB~~, and the weight of cleanup solvents used at that mill;
 - (5) The weight of VOCs and HAPs emitted at the four (4) mixing/blending tanks (MT7, MT8, MT9 and MT10) for each compliance period;
 - (6) The weight of VOCs emitted at the six (6) mixing tanks (MT1, MT2, MT3, MT4, MT5 and MT6) for each compliance period; and
 - (7) The weight of VOCs and HAPs emitted at the one (1) mill, identified as ~~SWB~~, for each compliance period.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly particulate observations and monthly inspections, and those additional inspections prescribed by

the Preventive Maintenance Plan.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

6. Renumbering:

All conditions after new Condition D.1.3 shall be renumbered accordingly.

Conclusion

The proposed steel ball mill (SB) shall be constructed and operated under the requirements of the existing operating permit, the applicable approvals issued after the original permit, Minor Source Modification 039-16492-00248, and Minor Permit Modification 039-16794-00248.